Z68 Extreme7 Gen3

Intel® Z68 Chipset

ASRock
www.asrock.com

Product Brief

- Premium Gold Caps (2.5 x longer life time), 100% Japan-made high-quality Conductive Polymer Capacitors
- Digi Power, Advanced V8 + 4 Power Phase Design
- Nvidia NF200 Chip Onboard (Dual VGA cards at PCI-E x16/x16; three VGA cards at x16 / x8 / x8)
- 1x PCIe 3.0 x16 Slot, 4 PCIe 2.0 x16 Slots, Supports AMD 3-Way CrossFireX™ and NVIDIA® 3-Way SLI™
- Supports Intel® HD Graphics Built-in Visuals
- Multi-VGA Output : D-Sub, DVI-D, HDMI, DisplayPort
- Supports Dual LAN with Teaming function
- Dr. Debug, Smart Switch Design: Power/Reset/Clear CMOS Switch with LED
- Support Intel Smart Response, Lucid Virtu Switchable Graphics
- Supports ASRock XFast USB, XFast LAN Technologies
- Supports ASRock On/Off Play, graphical UEFI, ASRock Extreme Tuning Utility (AXTU)
- Combo Cooler Option (C.C.O.)
- 7.1 CH HD Audio with Content Protection (Realtek ALC892 Audio Codec), Supports THX TruStudio™
- Free Bundle : 1 x Front USB 3.0 Panel, 1 x Rear USB 3.0 Bracket, 1 x 3.5mm Audio Cable, CyberLink MediaEspresso 6.5 Trial, ASRock MAGIX Multimedia Suite

The specification is subject to change without notice. The brand and product names are trademarks of their respective companies. Any configuration other than original product specification is not guaranteed.

Detail Specification

Platform	- ATX Form Factor: 12.0-in x 9.6-in, 30.5 cm x 24.4 cm - Premium Gold Capacitor design (100% Japan-made high-quality Conductive Polymer Capacitors)
CPU	- Supports 2nd Generation Intel® Core™ i7 / i5 / i3 in LGA1155 Package - Advanced V8 + 4 Power Phase Design - Supports Intel® Turbo Boost 2.0 Technology - Supports Intel® K-Series unlocked CPU - Supports Hyper-Threading Technology
Chipset	- Intel® Z68
Memory	- Dual Channel DDR3 memory technology - 4 x DDR3 DIMM slots - Supports DDR3 2133(OC)/1866(OC)/1600/1333/1066/800 non-ECC, un-buffered memory - Max. capacity of system memory: 32GB - Supports Intel® Extreme Memory Profile (XMP)
Expansion Slot	- 5 x PCI Express x16 slots (single at PCIE 3.0* x16 (PCIE2) mode, dual at PCIE 2.0 x16 (PCIE1) / PCIE 2.0 x16 (PCIE4) mode, or tripple at PCIE 2.0 x16 (PCIE1) / PCIE 2.0 x8 (PCIE4) / PCIE 2.0 x8 (PCIE6) mode; PCIE5: PCIE 2.0 x4 mode) * PCIE 3.0 is only supported with Intel® Ivy Bridge CPU. With Intel® Sandy Bridge CPU, it only supports PCIE 2.0. - 1 x PCI Express 2.0 x1 slot - 1 x PCI slot - Supports AMD Quad CrossFireX™, 3-Way CrossFireX™ and CrossFireX™ - Supports NVIDIA® Quad SLI™, 3-Way SLI™ and SLI™
Graphics	- Supports Intel® HD Graphics Built-in Visuals : Intel® Quick Sync Video, Intel® InTru™ 3D, Intel® Clear Video HD Technology, Intel® HD Graphics 2000/3000, Intel® Advanced Vector Extensions (AVX) - Pixel Shader 4.1, DirectX 11 with Intel® Ivy Bridge CPU, DirectX 10.1 with Intel® Sandy Bridge CPU - Max. shared memory 1759MB - Four VGA Output options: D-Sub, DVI-D, HDMI and DisplayPort - Supports HDMI 1.4a Technology with max. resolution up to 1920x1200 @ 60Hz - Supports DVI with max. resolution up to 1920x1200 @ 60Hz - Supports D-Sub with max. resolution up to 2048x1536 @ 75Hz - Supports DisplayPort with max. resolution up to 2560x1600 @ 60Hz - Supports Auto Lip Sync, Deep Color (12bpc), xvYCC and HBR (High Bit Rate Audio) with HDMI (Compliant HDMI monitor is required) - Supports HDCP function with DVI, HDMI and DisplayPort ports - Supports Full HD 1080p Blu-ray (BD) / HD-DVD playback with DVI, HDMI and DisplayPort ports
Audio	- 7.1 CH HD Audio with Content Protection (Realtek ALC892 Audio Codec) - Premium Blu-ray audio support - Supports THX TruStudio™
LAN	- PCIE x1 Gigabit LAN 10/100/1000 Mb/s - Broadcom BCM57781 - Supports Wake-On-LAN - Supports Energy Efficient Ethernet 802.3az - Supports Dual LAN with Teaming function - Supports PXE
Rear Panel I/O	I/O Panel - 1 x D-Sub Port - 1 x DVI-D Port - 1 x HDMI Port - 1 x DisplayPort - 1 x Optical SPDIF Out Port - 2 x Ready-to-Use USB 2.0 Ports - 1 x eSATA3 Connector - 4 x Ready-to-Use USB 3.0 Ports - 2 x RJ-45 LAN Ports with LED (ACT/LINK LED and SPEED LED) - 1 x IEEE 1394 Port - HD Audio Jack: Rear Speaker / Central / Bass / Line in / Front Speaker / Microphone
SATA3	- 2 x SATA3 6.0 Gb/s connectors by Intel® Z68, support RAID (RAID 0, RAID 1 , RAID 10, RAID 5, Intel Rapid Storage and Intel Smart Response Technology), NCQ, AHCI and "Hot Plug" functions - 4 x SATA3 6.0 Gb/s connectors by ASMedia ASM1061, support NCQ, AHCI and "Hot Plug" functions (SATA3_A4 connector is shared with eSATA3 port)
USB 3.0	- 4 x Rear USB 3.0 ports by ASMedia ASM1042, support USB 1.0/2.0/3.0 up to 5Gb/s - 1 x Front USB 3.0 header (supports 2 USB 3.0 ports) by ASMedia ASM1042, supports USB 1.0/2.0/3.0 up to 5Gb/s
Connector	- 4 x SATA2 3.0 Gb/s connectors, support RAID (RAID 0, RAID 1, RAID 10, RAID 5, Intel Rapid Storage and Intel Smart Response Technology), NCQ, AHCI and Hot Plug functions - 6 x SATA3 6.0 Gb/s connectors - 1 x IR header - 1 x CIR header - 1 x COM port header - 1 x HDMI_SPDIF header - 1 x IEEE 1394 header - 1 x Power LED header - 1 x PS2 header - CPU/Chassis/Power FAN connector - 24 pin ATX power connector - 8 pin 12V power connector - SLI/XFire power connector - Front panel audio connector - 4 x USB 2.0 headers (support 8 USB 2.0 ports) - 1 x USB 3.0 header (supports 2 USB 3.0 ports) - 1 x Dr. Debug with LED
Smart Switch	- 1 x Power Switch with LED - 1 x Reset Switch with LED - 1 x Clear CMOS Switch with LED
BIOS Feature	- 64Mb AMI UEFI Legal BIOS with GUI support - Supports "Plug and Play" - ACPI 1.1 Compliance Wake Up Events - Supports jumperfree - SMBIOS 2.3.1 Support - CPU Core, IGPU, DRAM, PCH, CPU PLL, VTT, VCCSA Voltage Multi-adjustment
Support CD	- Drivers, Utilities, AntiVirus Software (Trial Version), CyberLink MediaEspresso 6.5 Trial, ASRock Software Suite (CyberLink DVD Suite - OEM and Trial; ASRock MAGIX Multimedia Suite - OEM)

Unique Feature	- ASRock Extreme Tuning Utility (AXTU)
	- ASRock Instant Boot
	- ASRock Instant Flash
	- ASRock APP Charger
	- ASRock SmartView
	- ASRock XFast USB
	- ASRock XFast LAN
	- ASRock XFast Charger
	- Lucid Virtu
	- ASRock On/Off Play Technology
	- Hybrid Booster:
	  - CPU Frequency Stepless Control
	  - ASRock U-COP
	  - Boot Failure Guard (B.F.G.)
	- Combo Cooler Option (C.C.O.)
	- Good Night LED

Hardware Monitor	- CPU Temperature Sensing - Chassis Temperature Sensing - CPU/Chassis/Power Fan Tachometer - CPU/Chassis Quiet Fan (Allow Chassis Fan Speed Auto-Adjust by CPU Temperature) - CPU/Chassis Fan Multi-Speed Control - Voltage Monitoring: +12V, +5V, +3.3V, CPU Vcore
OS	- Microsoft® Windows® 7 / 7 64-bit / Vista™ / Vista™ 64-bit / XP / XP 64-bit compliant
Certifications	- FCC, CE, WHQL - ErP/EuP Ready (ErP/EuP ready power supply is required)
Accessories	- 1 x ASRock SLI_Bridge_2S Card - 1 x ASRock 3-Way SLI-2S2S Bridge Card - Quick Installation Guide, Support CD, I/O Shield - 6 x SATA Data Cables (Optional) - 2 x SATA 1 to 1 Power Cables (Optional) - 1 x 3.5mm Audio Cable (Optional) - 1 x Front USB 3.0 Panel - 4 x HDD Screws - 6 x Chassis Screws - 1 x Rear USB 3.0 Bracket - 1 x PS/2 Mouse/Keyboard + USB 2.0 Bracket

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Next-Gen PCIe 3.0 Support

By adopting PCI-E 3.0 quick switch IC onboard, the ASRock motherboards can support the Next-Gen PCI-E 3.0
PCI Express 3.0 can maximize the bandwidth for the next-gen PCI Express 3.0 VGA cards, provide ultimate graphics performance.

Get PCI-E 3.0 Benefits

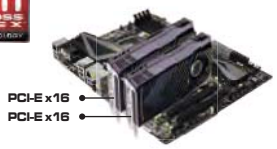
- Higher bit rate - 8.0GT/s
- Higher bandwidth per lane - 1GB/s
- Higher efficiency - 98.5% encoding efficiency
- 100% backward compatible with previous PCI-E 2.0 / 1.0 standard

PCI-E architecture	Raw bit rate	Bandwidth per lane	Encoding Efficiency
PCI-E 2.0	5.0GT/s	500MB/s	80%
PCI-E 3.0	**8.0GT/s**	**1GB/s**	**98.5%**

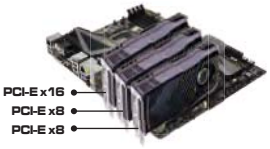
NVIDIA NF200 Chip Onboard

NVIDIA NF200 chip generates more PCI-E lanes for you With this chip onboard, the ASRock Z68 Extreme7 Gen3 is capable of running dual VGA cards at PCI-E x16 / x16 mode and three VGA cards at x16 / x8 / x8 mode to get maximum graphics performance.

Dual VGA Cards
SLI / CrossFireX



Three VGA Cards
3-Way SLI / CrossFireX



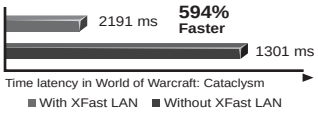
XFast LAN

Faster Internet Access

1 LAN Application Prioritization

You can configure your application priority ideally and/or add new programs.

2 Lower Latency In Game



After setting online game priority higher in XFast LAN, it can lower the latency in game.

3 Traffic Shaping

YouTube HD

You can watch Youtube HD video and download files simultaneously.

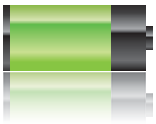
4 Real-Time Analysis Of Your Data

With the status window, you can easily recognize which data streams you are currently transferring.

XFast Charger

Fast Charge & Charge Anytime

XFast Charger is the best and fastest technology to charge your mobile devices via PC. With the superb XFast Charger USB port, users are assured to enjoy the quick charging experience anytime. In addition to Apple devices, it is also capable of charging the BC 1.1 standard smart devices.



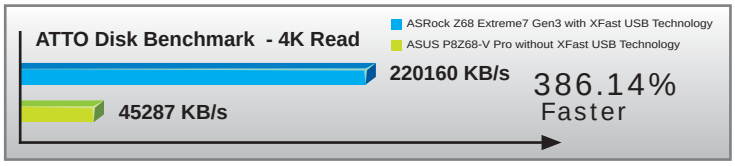
XFast USB Technology

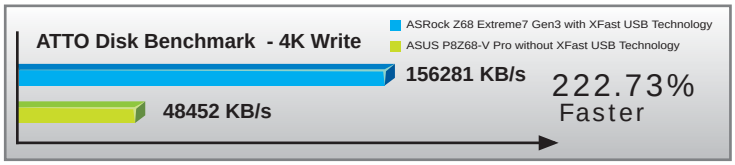
The world s fastest USB transfer speed.

XFast USB

Boosts up your USB speed

USB 3.0 Benchmark





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On/Off Play

Enjoy great audio experience from the portable audio devices via PC speaker even when the system is powered off.

Free Bundle
3.5mm Audio Cable

Graphical UEFI

* Graphical Visual Experience
* Mouse Enabling
* Supports 3TB bootable HDD

Cyberlink MediaEspresso 6.5 Trial

The fastest video media conversation software

THX TruStudio

Delivering the fullest audio experience for games, music and movies.

MAGIX Multimedia Suite

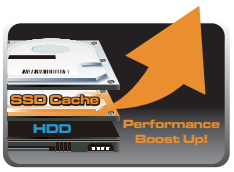
The ultimate solutions to enhance your media experience. From music management, music creation, video editing to photo management.

Lucid Virtu™

With Lucid Virtu software, next-generation PCs with 2nd Generation Intel® Core processor platforms will dynamically assign tasks in real time to the best available graphics resource based on power, performance and features.

Intel Smart Response Technology

For users who are tempted to connect the SSD and HDD on ASRock Z68 Motherboard Series, the Intel Smart Response Technology can make the SSD become the "Cache of the HDD" to boost up the HDD access speed.



AXTU

ASRock Extreme Tuning Utility (AXTU) is an all-in-one software to fine-tune different features in an userfriendly interface, which includes Hardware Monitor, Fan Control, Overclocking, OC DNA and IES.

Intel® HD Graphics Built-in Visuals

Intel® Quick Sync Video | Intel® InTru™ 3D | Intel® Clear Video HD Technology | Intel® HD Graphics 2000/3000 | Intel® Advanced Vector Extensions (AVX)

Dual LAN Teaming

Dual LAN with Teaming function enabled on this motherboard allows two single connections to act as one single connection for twice the transmission bandwidth, making data transmission more effective.

Digi Power

By adopting digital Pulse-width modulation (PWM), the Z68 Extreme7 Gen3 can provide CPU Vcore voltage more efficiently and smoothly.

6 SATA3 + 6 USB 3.0

Coupled with six USB 3.0 and six SATA3 ports, the ASRock Z68 Extreme7 Gen3 offers plenty of storage options. Based on the concept of customization, this board is specially equipped with six USB 3.0 ports (two from external Front USB 3.0 panel, four from real I/O) and six SATA 3 connectors to satisfy PC DIYer s various needs.

Advanced V8 + 4 Power Phase

The ASRock Z68 Extreme7 Gen3 is designed with a V8 + 4 Power Phase, featuring sturdy components and completely smooth power delivery to the CPU. It offers unmatched overclocking capability and enhanced performance with the lowest temperatures for PC gaming enthusiasts.

C.C.O. (Combo Cooler Option)

C.C.O. provides the flexible option to adopt three different CPU cooler types, Socket LGA 775, LGA 1155 and LGA 1156.

Premium Gold Caps

Premium Gold Caps are 100% Japan-made solid capacitors are sleek, high gloss caps with a premium gold coating representing long life and stable performance.

Craftsman Heatsink Design

The ASRock Z68 Extreme7 Gen3 features a craftsman heatsink design. The metallic and minimalism look of the package brings the atmosphere of technology; On the other hand, the stylish brushed aluminum heatpipe design also ensures its effective heat dissipation.